

ABSTRACT OF THE DISCLOSURE

SYSTEMS FOR CONTROLLING PLANT AND FLOWER
MOISTURE TRANSPIRATION RATES

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10 The present invention relates to a system for controlling plant and flower moisture transpiration and thereby extending the period of time in which cut flowers can be displayed before senescence produces a flower which has exceeded its aesthetic value. The systems of the present invention comprise:

a) a first component in the form of a solution, said solution applied to the surface of a plant or flower exposed to air, said first component comprising:

15 i) a polymer having a water vapor transfer rate of less than $10 \text{ g-mm/m}^2\text{-day}$ and a glass transition temperature, T_g , greater than about 30°C ;
ii) the balance carriers and adjunct ingredients;
wherein said polymer is in the form of a microemulsion having a particle size less than 400 nanometers; and

20 b) a second component comprising:

i) a source of energy for the plant or flower being treated;
ii) an antimicrobial;

wherein said second component is dissolved in water to form a solution and into which solution is placed the plant or flower to be preserved.